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WAR AGAINST INFLATION

THE

AGRICULTURAL

• SITUATION •

MAY 1942

A Brief Summary of Economic Conditions

Issued Monthly by the Bureau of Agricultural Economics, United States Department of Agriculture

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GOVERNMENT ACTION has been taken to stop the spiraling rise in the cost of living. Ceilings have been put on prices at levels prevailing in March, when the cost of living was 113 percent of the 1935-39 average. Exceptions include practically all nonprocessed farm commodities and some processed commodities such as butter, cheese, dressed poultry, flour, mutton and lamb. * * * Action was taken to protect national welfare from the hazards of spiraling living costs during a period when all energy is needed in a united front against aggression. Since the outbreak of World War II, prices of raw materials have gone up 66 percent, wholesale prices 31 percent, retail prices 25 percent. Farm prices have gone up 66 percent on average, and for several months the ratio of prices received to prices paid by farmers has been at parity. * * * Farmers this spring have been breaking all former records in the production of milk, meats, and eggs. They have put in record acreages of oil crops and other protective foods. Full steam is up in the war against aggression, full power the Nation over to produce the greatest volume of agricultural and military supplies by any people in any war.

WASHINGTON, D. C.,
April 27, 1942.

WAR ON INFLATION was declared today by the United States Government. The President said in a 7-point program:

* * * each one of these points is dependent on the other if the whole program is to work * * * The only effective course of action is a simultaneous attack on all of the factors which increase the cost of living, in one comprehensive, all embracing program covering prices, profits, wages, taxes and debts.

Purpose of the program is to stop the upward spiralling of prices against the common interests of producers, processors, distributors, and consumers in this period of war crisis. Appeal was made to all of the people to join hands in the fight against economic and physical aggression.

SEVEN-POINT PROGRAM

1. We must, through heavier taxes, keep personal and corporate profits at a low, reasonable rate.
2. We must fix ceilings on prices and rents.
3. We must stabilize wages.
4. We must stabilize farm prices.
5. We must put more billions into War Bonds.
6. We must ration all essential commodities which are scarce.
7. We must discourage installment buying, and encourage paying off debts and mortgages.

—PRESIDENT ROOSEVELT on Price Control, *Fireside Chat*, April 28, 1942.

Commodity Reviews

SPRING WORK: Delayed

FARMERS were behind with spring work over most of the country in April—delayed by adverse weather. The Crop Board said that many farmers were reporting difficulty in getting competent help, and that some farmers were being handicapped by lack of production supplies. But moisture conditions were reported as being “better than usual” this spring, and prospects for early pastures “the best in recent years.”

The Crop Board said: “Livestock numbers, exclusive of work stock, are above predrought peaks and still increasing, feed reserves are large, stocks of grain on farms are the largest on record for this season of the year, pastures and range prospects are promising, and the production of meat, lard, milk, and eggs is currently running at levels that provide fully the usual per-

capita supply in addition to the present volume of Lend-Lease purchases.

“Unless offset by increased use of farm machinery, the shortages of competent labor now restricting the expansion of farming operations near industrial sections may affect more of the agricultural areas later in the year or next year. The decrease in manpower is resulting in some consolidation of farms, more efficient use of equipment, longer working hours and the adoption of short-cut methods to save labor—but the trend is still toward new high records of production.”

FERTILIZER: Margins

OPA has restricted dealers’ handling charges on nitrate of soda, sulphate of ammonia, and cyanamide following investigations which revealed markedly higher retail prices this spring than last as compared with increases in base

prices charged by producers and importers.

Maximum margins for cash sales of these fertilizers, direct or through agents to consumers, were established at \$4 per ton; maximum margins of mixers for cash sales to dealers at \$2 per ton, and dealers' margin on cash sales to consumers at \$2 per ton. All transportation expenses and the cost of tax tags and attaching the tags—paid by the reseller—may be added to such margins, records of which must be kept by resellers.

These three fertilizers are sold chiefly in the southeastern United States, where they are used in growing cotton, sugar, corn, and vegetables. Little is sold elsewhere. Limited shipping facilities for importing South American nitrates, increased military requirements, and increased farmer demand have contributed to a scarcity in supplies this season.

PRICES: Parity

The long-standing gap between prices received and prices paid by farmers has been closed. To keep it

closed is a major objective of Government in an economic program designed to stabilize prices during this period of wartime emergency. Government economists forecast that the ratio of prices received to prices paid by farmers will continue at approximate

Index Numbers of Prices Received and Paid by Farmers

1910-14=100

Year and month	Prices received	Prices paid	Buying power of farm products ¹
1941			
April	110	124	89
May	112	125	90
June	118	128	92
July	125	130	96
August	131	133	98
September	139	136	102
October	139	139	100
November	135	141	96
December	143	142	101
1942			
January	149	146	103
February	145	147	99
March	146	150	97
April	150	151	99

¹ Ratio of prices received to prices paid.

² Revised.

Prices of Farm Products

(Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States)

Product	5-year average, August 1909-14	April average 1910-14	April 1941	March 1942	April 1942	Parity price April 1942
Cotton, lb.	cents	12.4	12.4	10.45	18.06	19.03
Corn, bu.	do	64.2	63.4	62.0	78.4	79.7
Wheat, bu.	do	88.4	89.3	76.0	105.1	99.7
Hay, ton.	dollars	11.87	12.16	8.10	11.03	11.13
Potatoes, bu.	cents	69.7	68.8	157.4	103.9	116.2
Oats, bu.	do	39.9	40.9	35.2	51.9	51.8
Rice, bu.	do	81.3	81.3	112.6	168.6	178.1
Peanuts, lb.	do	4.8	5.0	3.62	6.03	6.25
Tobacco: ¹						
Fire-cured types, 21-24 lb.	do	13.6	8.4	12.9	11.2	12.9
Maryland types, 32 lb.	do	22.9	—	30.0	27.0	21.5
Air-cured, dark types, 35-37 lb.	do	11.2	—	11.8	—	10.5
Cigar filler types, 41-45 lb.	do	14.1	—	9.0	12.5	11.4
Cigar binder types, 51-55 lb.	do	19.9	—	14.3	16.8	13.3
Apples, bu.	dollars	.96	1.18	1.06	1.30	1.41
Beef cattle, cwt. ¹	do	5.42	5.73	8.55	10.26	10.71
Hogs, cwt. ¹	do	7.27	7.71	8.16	12.52	13.48
Chickens, lb.	cents	11.4	11.8	15.7	18.0	18.4
Eggs, doz.	do	21.5	16.6	19.7	25.8	25.6
Butterfat, lb.	do	26.3	25.0	32.6	35.7	37.0
Wool, lb.	do	18.3	18.0	34.5	38.3	39.2
Veal calves, cwt. ¹	dollars	6.75	6.80	9.86	12.14	12.22
Lambs, cwt. ¹	do	5.88	6.45	9.37	10.63	10.83

¹ Revised.

² Post-war base.

³ Adjusted for seasonality.

parity during the remainder of this year.

Farm income is rising seasonally, but less sharply than at this time last year. Largest gains are from the unusually heavy marketings of hogs at relatively high prices; income from other livestock and animal products also is larger than at this time last year. Livestock and animal products usually account for about two-thirds of all income from farm marketings during the June quarter.

The great volume of commodity-buying by the Department of Agriculture is of increasing importance to farmers. Following is the record of purchases during the year ended March 15, 1942. It includes quantities made available for Lend-Lease by the Commodity Credit Corporation, as well as purchases by the Agricultural Marketing Administration.

Commodity	Amount	Cost (f. o. b.)
	Million pounds	Million dollars
All farm commodities.....	7,602	810
All foods.....	6,850	672
Meat products.....	1,116	237
Lard.....	451	50
Pork.....	657	179
Other.....	8	8
Dairy products.....	1,521	164
Eggs.....	234	119
Vegetables.....	829	27
Fruit.....	1,180	44
Grain and products.....	1,430	32
All other foods.....	539	49
Nonfoods.....	752	133
Cotton, baled.....	357	58
Tobacco.....	213	68
Other nonfoods.....	182	12

FARM WAGES: Up

Farmers were hiring more help and paying higher wages this April 1 than last. More than 2,000,000 persons were on farm pay rolls compared with slightly less than that number a year ago; but there were fewer family workers on the farms, and total employment at 9,483,000 workers was 97,000 smaller than on April 1 last year. Wages were the highest in more than 12 years—177 percent of the 1910-14 average. Rates per month

without board ranged from less than \$30 in a few southeastern States to a high of \$97 in California.

BAE expects that slightly fewer persons will be employed on the farms this year than last, but that this will not prevent the attainment of the great volume of production sought in Food for Freedom goals. The dairy and poultry farms have been turning out record quantities of milk and eggs this spring, livestock slaughter has been larger than in 1941, carlot shipments of fruits and vegetables have been bigger. Bigger acreages of practically all crops have been planted.

MACHINERY: WPB

WPB has amended its farm equipment program so as to permit increased production of peanut pickers, potato planters, beet drills, beet lifters, steel plow shares, cylinder-type power corn shellers, harness hardware, and individual livestock drinking cups. The amendment enables manufacturers to produce 3,600 new peanut pickers this year. Pickers will be distributed to farmers through cooperative peanut associations in order to assure custom picking and other cooperative methods of harvesting.

MILK: Record Flow

Milk production continues to exceed former records, is expected to total more than 12 billion pounds this month, and more than 12.5 billion in June. Production has been running about 4 percent larger this year than last; at this increased rate the total output for 1942 would be about 120 billion pounds against 115.5 billion in 1941, and 105.2 billion average for 1936-40. Prices of dairy products in mid-April reflected the recent increase in the Government's buying price of butter and the less-than-usual seasonal declines in prices of most other dairy products.

Big question is whether price relationships will continue to induce

dairymen to increase milk production. BAE noted last month that despite the advance in prices of butter, butterfat was cheaper in comparison with hogs than in any other April since 1918. Hogs compete with cows in part of the Corn Belt, and the number of cows marketed appears to have increased. In February the total of all cows and heifers slaughtered under Federal inspection was the largest on record for that month.

Farm supplies of feed grain per unit of livestock are large. Prospects for pastures and for feed production this year were reported last month as being "outstandingly favorable."

EGGS: Increase

Production of eggs is on the seasonal downslide, but the output in coming months should be bigger than in the like period last year. At current and prospective prices it is profitable to convert feed into eggs. Besides good consumer demand, the market has been expanded greatly by Government buying of eggs. The Department of Agriculture is making contracts with egg driers for delivery through December 31.

BAE says that farmers apparently are going ahead with plans to increase the production of chickens and turkeys this year. Hatchery output of baby chicks was 25 percent larger this March than last, and the number of eggs set was 18 percent larger. Many more turkey poult were hatched this March than last. Expectation is that farmers will raise 6 to 10 percent more chickens and turkeys than in 1941.

Despite increased production, higher prices are forecast for chickens and turkeys.

FATS, OILS: Unchanged

Little change is expected in prices of fats and oils during the next few months. Basis is the OPA ceilings. Meanwhile, the extraordinary demand for fats and oils continues un-

abated, and farmers are being urged to increase the production of oil crops this year. In Canada, too, every effort is being made to increase the output of flaxseed. * * * Last year, the consumption of fats and oils in the United States totaled nearly 11 billion pounds; this year, the requirements are much larger.

Of the 11 billion pounds consumed last year, about 7 billion was utilized for food, and 4 billion for soap and other industrial products. Total in both categories was the largest on record. During the last 30 years the consumption of fats and oils has practically doubled. Per capita utilization increased from 53 pounds in 1912 to 82 pounds in 1941. Biggest percentage increases have been in industrial uses; smallest in the consumption of butter.

FEED: Supply

Feed crops will be a little smaller this year than last if yields of only average size are obtained on the acreages farmers reported in March they intended to plant this year. But the output of high-protein feeds will be considerably larger—about 15 percent larger in 1942-43—in view of increased acreage of soybeans, peanuts, cotton and flax. Meanwhile, it is indicated that the carryover of corn may be 15 to 20 percent smaller this October 1 than last when the total was 646 million bushels. Total supply of feed grains per animal unit in 1942-43 may be the smallest in several years.

CATTLE: Big Supply

Another big supply of cattle is in the feed lots. Total was only 2 percent smaller this April 1 than last when largest numbers in recent years were reported. Feeders reported that about 71 percent of the cattle had been on feed for more than 3 months, and indicated that the proportion to be marketed before July 1 is a little larger this year than last. Kansas, Minnesota, Missouri, Nebraska, and South

Dakota reported larger numbers of cattle on feed this April 1 than last; decreases were reported in Illinois, Indiana, Iowa, Michigan, Ohio, and Wisconsin.

Marketings of slaughter cattle during the first quarter of 1942 were about 20 percent larger than during the like period of 1941. Inspected slaughter for the first quarter this year was the largest on record, but it is unlikely that the same rate of increase over 1941 will be maintained throughout the year. It is practically certain, however, that total cattle slaughter will be substantially larger this year than last.

HOGS: Increase

Market movement of the large 1941 fall pig crop is now underway, and the supply of hogs during the next few months—through September—is expected to be about 15 percent larger than a year earlier. Meanwhile, packers operating under Federal inspection have been asked to offer for sale to the Department of Agriculture (for Lend-Lease) at least two-fifths of their pork production and two-thirds of their lard production during the next 3-6 months. Less pork and lard will be available for domestic consumption this summer than last, but supplies of other meats will be larger, and the total of all meats may be about the same as in 1941.

Hog prices in mid-April were the highest in 16 years, and the hog-corn price ratio the best since early autumn of 1938. Market reports in late April indicated that the favorable hog-corn price ratio and the narrowness of the spread between prices of light and heavy hogs were inducing farmers to feed pigs to relatively heavy weights. Storage stocks of both pork and lard were smaller this April 1 than last. Probability is that the 1942 pig crop will be the largest on record.

WHEAT: Problem

Big problem in winter wheat soon to be harvested is how to get the crop stored. Transport facilities already

are overburdened and grain storage space is at a premium. Many observers say that larger quantities will have to be kept on the farms this year even though most farm bins and granaries are already full; that additional farm storage facilities must be built. Farmers are urged to consult with USDA War Boards regarding storage needs.

April estimates indicated a winter wheat crop of 625 million bushels, but this does not include the big acreage of "volunteer" wheat that may be harvested this season. Add 164 million bushels of spring wheat. Add a carry-over of 631 million bushels. The total—1,420 million bushels—compares with 1,331 million bushels last year. Domestic disappearance is forecast at 675 million bushels, leaving 745 million for export and carry-over in 1943.

COTTON: Increase

Production of cotton goods—but increasingly for military use—continues to set new high records. Cotton mill consumption is expected to total about 11.5 million bales this current year ending on July 31 next, leaving a prospective carry-over of little more than 10 million bales for 1942-43. This is a little over a 10-months' supply at the current rate of consumption; moreover, much of it will be low grade, short staple cotton. About 60 percent of it will be of staples under 1 inch in length, and not more than 3 percent of staples 1½ inch and longer.

Meanwhile, the South is well into a new production season, and hoping for good yields on a larger acreage this year than last. In mid-April the price of cotton was slightly above parity. Government also is offering good premiums for long staple cotton needed in bigger supply this year in the production of military goods . . . Of interest in the current price situation is the narrowing of the spread between prices of cotton and the ceilings on cotton goods.

FLAXSEED: Loans

The following loan rates on flaxseed produced in 1942 have been announced by the Department of Agriculture: \$2.40 a bushel for No. 1 flaxseed delivered at Minneapolis, St. Paul, Duluth, Chicago, and Portland; \$2.45 at Los Angeles and San Francisco, and \$2.35 at Kansas City, Mo.

Loan values at local stations for flaxseed in storage on farms or in country warehouses will be determined on the basis of the terminal market rates less transportation and 4 cents per bushel handling costs. The average loan rate on flaxseed stored on farms will be at least \$2.20 per bushel. The discount for flaxseed grading No. 2 will be 5 cents per bushel. A deduction of 6 cents per bushel will be made unless evidence is submitted that freight has been paid and that freight bills have been registered for transit privileges.

No storage allowance is made for farm storage, and loans secured by warehouse receipts will be discounted 7 cents a bushel unless they carry an endorsement stating that storage charges have been paid through June 30, 1943. This deduction represents the estimated average of storage charges which the Commodity Credit Corporation would be required to pay if the producer failed to redeem his note. Loans will be made through January 31, 1943, and the notes will mature on demand or June 30, 1943.

Only flaxseed grading No. 2 or better will be eligible for loan. Seed containing more than 30 percent damage, or more than 11 percent moisture, or otherwise of low quality, is not eligible. Seed must have been produced in compliance with AAA regulations.

SUGAR: Increase

Sugar beet growers have indicated they will put in 983,000 acres this year compared with 795,000 in 1941—an increase of 24 percent. Principal limiting factors are factory capacity and the probable labor supply for

tending and harvesting the crop. Largest acreage of record was 1 million planted in 1933. Probability is that about 900,000 acres will be harvested this year compared with 757,000 in 1941. Production in 1941 totaled 10.3 million tons of sugar beets, yielding 1.6 million tons of sugar, raw value. Continental production of sugar from sugar cane—in addition—was 419,000 tons, raw value.

SHEARLINGS: Wanted

Uncle Sam wants shearlings. Shearlings are sheepskins with a little wool left on. They are needed for aviation suits. No. 1 shearling pelts (with wool length from $\frac{1}{2}$ to 1 inch) were recently quoted at \$2 each. No. 2's (with $\frac{1}{4}$ to $\frac{1}{2}$ inch of wool) were quoted at \$1.80. Pelts from ewes, yearlings, fed lambs, and spring lambs will qualify for these premium prices. Growers' part is to market slaughter sheep and lambs carrying at least $\frac{1}{4}$ inch of wool—preferably $\frac{1}{2}$ inch—this season.

TOBACCO: Big Supply

Tobacco will be in big supply this year as measured by pre-war averages. But domestic consumption of tobacco also is far above pre-war figures. Consumption during the year ending June 1942 has been tentatively estimated at 225 billion cigarettes compared with 190 billion the preceding year, and 6 billion cigars compared with 5.7 billion in 1941. The use of snuff is larger than in 1941. Chewing continues to increase but at a reduced rate.

Carryover of tobacco will be smaller this year than last, but Government acreage allotments have been raised, and growers probably will plant up to the limit of these allotments. Hardly to be expected is that they will do less, in view of last year's good level of prices. Yields per acre will spell the difference in supply figures for 1942-43. Last year the crop was unusually small.

SEEDS: Increase

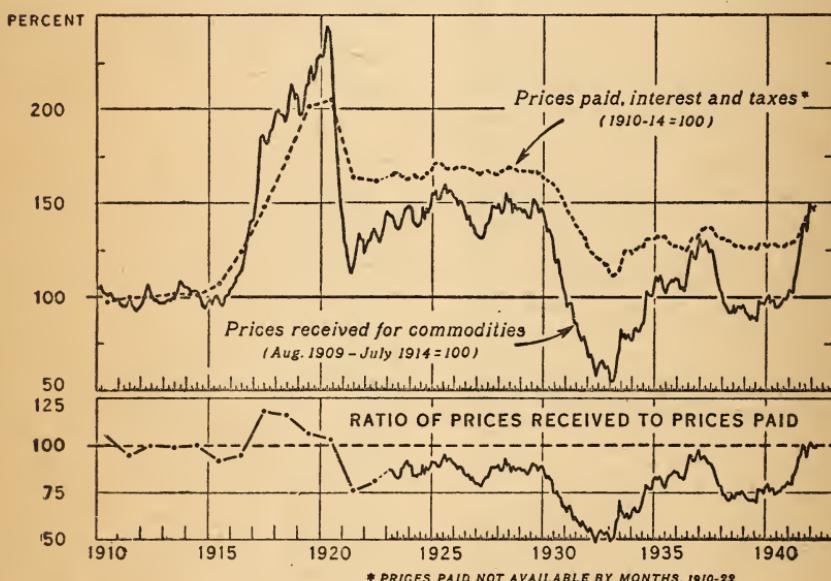
Commercial growers expect to harvest bigger crops of vegetable seeds this year than last. Only exceptions in a list of 50 seeds are collard, cress, eggplant, loose-leaf lettuce, okra, and smooth peas. Production of nearly two-thirds of the vegetable seeds in 1941 fell below expectations, while that of about one-third was better than expected. Much larger acreages are being put in this year, and the yields should be bigger than in 1941. Seed crops expected to show largest increases this year over last are kohlrabi, Chinese cabbage, chicory, leek, celery, cauliflower, kale, chard, mangoldwurzel, rutabaga, and endive.

TRUCK CROPS: More

Crop reports in April indicated a 6 percent increase in acreage of vegetables grown for shipment this year. Some shift toward crops that were high in price last year was indicated—particularly cabbage and onions. There is good consumer demand for fresh vegetables, and prices compare favorably with those of last year. Most of the cannery crops will be in bigger supply this year, principally to meet the extraordinary Government requirements under Lend-Lease commitments . . . The total pack of canned fruits will probably be the same this season as last.

FRANK GEORGE.

PRICES RECEIVED AND PAID BY FARMERS, INDEX NUMBERS, UNITED STATES, 1910-42



For 20 years prior to 1941 the average of prices received by farmers in the United States failed to reach parity (the relation to prices paid by farmers, including interest and taxes, which prevailed in 1910-14). The closest approach was in 1937 when decreased production of some commodities due to drought plus improved consumer demand carried prices to 98 percent of parity. From August 1941 through April 1942, prices averaged 99 percent of parity, and in 2 of these months were slightly above parity, reflecting increased consumer demand and Government purchases connected with the war.

War Foods and the Small Farmer

SECRETARY of Agriculture Claude R. Wickard, 7 days before the Department of Agriculture announced revised farm production goals, said:

Our greatest opportunity * * * is to get increased agricultural production from the small farms of this country.

The Secretary's statement emphasized the need for top-capacity operation of the Nation's farm plant—by small as well as large producers. Records of 430,000 Farm Security rehabilitation borrowers show how diversification can be accomplished and essential food production upped when credit is combined with guidance. The average family which had been on the small loan program a year or more, produced \$327 worth of food and other goods for home use in 1941, compared with \$163 worth in the year before receiving FSA aid—an increase of 101 percent.

These families had canned an average of only 139 quarts of fruits and vegetables prior to FSA help. Last year they canned an average of 297 quarts—an increase of 114 percent. FSA borrowers in 1941 increased meat production for home use by 236 pounds—an increase of 94 percent—and milk production by 184 gallons, or 64 percent. In 1941, each family produced for home use an average of 131 dozen eggs and 10 gallons of lard, and stored 27 bushels of fruits and vegetables.

These increases in food production for home use meant better diets and better health for thousands of small American farm families. They meant that families who might be eating out of the Nation's larder were filling it instead. To grow food for freedom, FSA borrowers need only to increase production of the things they've been producing for themselves.

FTER Food for Defense goals were announced in 1941, FSA borrowers were urged to increase livestock, dairy and poultry production in areas where the products were most needed. In South Carolina, Georgia, Florida, and Alabama, each family revised its farm and home plan to include 50 more baby chicks, 1 more brood sow, 2 more milk cows.

Supplemental loans reached nearly every FSA borrower—some 54,000 families in the 4 States. By January 1942 these southern farmers reported they had raised some 5,000,000 chicks. They sold 2,250,000 cockerels to pay the original investment and feed bill. All pullets were kept for egg production, are now producing more than 500,000 eggs a day.

The farmers bought 20,000 brood sows, which would normally produce litters of 120,000 pigs a year. Their 20,000 additional cows are expected to produce \$1,000,000 worth of milk in 1942, in addition to baby beef and young milk stock.

PEARL HARBOR goals set the pace for new food production standards. FSA regional directors met on January 2 to outline Farm Security's war policy. Field procedures for financing food production were streamlined. Simplified farm plans centered upon essential foods. Farm supervision for Food for Freedom crops was given priority.

Three groups were singled out as most likely candidates for increased food production. Farm Security would make: (1) Substantial Food-for-Freedom loans to present and future standard rehabilitation borrowers for additional stock and crops; (2) smaller Food-for-Freedom loans to low-income farmers whose land resources were inadequate for regular loan eligibility, but sufficient for increased production of food, feed and

other needed war crops; (3) farm and home improvement loans to enable non-self-supporting families to improve their living conditions, to build up their soil or get more land necessary for participation in the war food program.

Loans up to \$150 would continue to be made to children of low-income families for seed and stock needed for vocational agriculture club projects.

BY February 1942, county FSA supervisors reported that Farm Security's part in the Department's Food-for-Freedom program was out of the blueprint stage. In many States, 1942 production was well under way. For example, FSA borrowers in South Dakota pledged to produce for 1942:

2,899 acres of flax,
1,438 acres soybeans,
56,742 bushels potatoes,
998,943 dozen eggs,
1,768,248 pounds butterfat,
8,902,636 pounds beef,
9,114,957 pounds pork,
403,507 pounds chickens,
20,700 bushels corn,
103,452 bushels other grains,
943,238 quarts canned, and 23,868
bushels stored, fruits
and vegetables.

From Maine through Connecticut came production estimates from 6,000 more borrowers. Small New England farmers would bring 11,500 more cows into production in 1942, would add 853,600 pullets to their flocks, would fatten 15,000 pigs for market. If the growing season was favorable, gardens would produce an estimated \$518,150 worth of foodstuffs.

In Louisiana, small farmers on the Farm Security program worked out the following production schedule for their farms: (1) A garden large enough to furnish a continuous supply of fresh vegetables to meet each family's needs and a surplus to fill a budget of canned and dried vegetables; (2) at least 2 cows; (3) not less than 50 to 75 laying hens; (4) at least 1 sow; (5) 1 beef for home use; (6) enough sorghum or sugar cane to provide sirup

for home use with a surplus to sell; (7) a 25-percent increase in Irish potatoes in areas suited to production; (8) enough grain and roughage to obtain maximum production from all livestock on the farm.

MARCH reports from FSA's California office indicated that some 10,000 borrowers in California, Nevada, Utah, and Arizona, with the aid of loans totaling \$1,250,000 will increase their normal output sufficiently to give every soldier in an army of 7,000,000 men 4 additional eggs, a strip of ham or bacon, two 16-ounce cans of tomatoes, and 3 pounds of sugar. This, FSA borrowers said, was their concrete expression of patriotism and loyalty.

All over the country Food-for-Freedom stories were heard—some took on unusual twists but most were simple straight-from-the-heart accounts of what small farmers were doing to help Uncle Sam win the war.

In Suwannee County, Fla., a "Victory Pig" campaign was started. All 200 FSA borrowers in the county joined up, chose the shoit "most likely to succeed," nicknamed him "Vic" for Victory and planned to give him special care and feed. On a coming day this September or October, hundreds of "Vics" will be sold at auction; proceeds will go into war bonds and stamps.

Five thousand other southern borrowers have dedicated "An Acre for a Soldier." From now on, these farmers pledge to treat this acre as "My Soldier's Acre," to give it special care so that one soldier at the front will always be fed and warm.

But no farmer in America promised more patriotic production for 1942 than did a farm woman at Cedar Cove, Ala. "if the Lord gives me my helth to doble my canning record, and raze 2 hogs for the boys in service and 1 for myself." She added: "I have Pearl Harbor rote down in my Hart."

JOSEPH STAHL,
Farm Security Administration.

Packaging the Nation's Food

ABOUT the middle of last year, we began to have the uncomfortable feeling that supplies of burlap and tin were going to be short. Our worst fears became a certainty almost before the echoes of the bombs that fell on Pearl Harbor had faded away. In successive steps large quantities of burlap and tin were earmarked for military use; ships that had been transporting these materials from the Far East were diverted to more urgent duties; and, as a last straw, many important producing areas fell into the hands of the Japanese.

To help cope with the emergency, the War Production Board put burlap under complete allocation control because of the uncertainty of future shipments from Calcutta, where almost 90 percent of the world's supply is manufactured. Now the Army, Navy, and Office of Civilian Defense have first call on burlap, and the use of whatever supplies are left has been restricted to bagging agricultural products.

A PROGRAM of voluntary conservation of supplies for agriculture has been launched, with farmers and distributors being urged to take better care of bags—patching them when necessary—so that the bags will last longer. Bags are being returned to trade channels more quickly, thus making it possible for less burlap to do more work. Mills using wool are returning used burlap bags to wool growers, the number returned for reuse now totaling more than one-third the number critically needed for handling the new domestic wool clip. Processors of other products are cooperating in the same way.

Other materials are being sought to take the place of burlap, and suitable substitutes are being developed—cotton, for example. Short staple cotton can be used for bagging material and we have large quantities of that staple

The packaging of foods from farm to market, in processing, and in National and Lend-Lease distribution is an important part of the war effort. Bags, boxes, crates, cans, and other containers are needed in mountainous supply. Some packaging materials are scarce, must be used economically. New types of containers and new packaging techniques are being developed to help fill the gap * * * Altogether, assurance is that the high flow of food this year will not be checked for lack of packaging. The accompanying article highlights the current situation.—Ed.

on hand. A recent War Production Board order defines cotton fabrics suitable for bags and assigns an A-2 rating for the manufacture of such fabrics. Some cotton mills, formerly manufacturing finer materials, have switched to bag fabrics. And over 12,000 rug looms, idle through a scarcity of jute, will soon be turning out bagging material and duck.

Paper is receiving considerable attention from bag manufacturers. Products such as rice and beans can be marketed in solid paper containers treated chemically so as to be tough and moisture repellent. Commodities such as oranges and onions can be successfully marketed in mesh bags made of twisted paper strands. Additional materials undoubtedly will be used as substitutes as the burlap shortage becomes more acute.

AS FOR tin, a War Production Board order provides that enough tinplate for canning certain "primary" food products shall be made available. Primary products include specified fruits, fruit concentrates, and pectin;

some vegetables—principally those for which production goals have been established; tomato juice; a few kinds of fish and shell-fish; and miscellaneous foods—among them baby food formulas, evaporated milk, dry milk, special dietary products, and dehydrated vegetables.

Tinplate in quantities ranging from 25 percent of that required for the 1940 pack to 125 percent has been allocated for a long list of "secondary" foods. The quantity limits imposed on secondary products, however, relate only to the pack permitted for civilian consumption. If more of these foods are needed by the Army, Navy, Lend-Lease or other United States Government agencies, the pack put in tin cans may be increased.

Cans for products which are non-essential from a primary defense standpoint have been ruled out entirely. For the duration, at least, dogfood will come otherwise than in tin cans. And so will beer, dried beans, baking powder, cereals and flour, spices and condiments, and tobacco.

SIGNIFICANT imports of tin are almost out of the question, now that Japan controls British Malaya and the Dutch East Indies; and recovery of tin from old cans is difficult, largely because of the labels, lacquer, and lithograph coatings used by manufacturers. But one West Coast firm is reported to have set up a pilot plant to develop a practical process for detinning, and to be accepting empties as they are discarded, without any special cleaning operation. The plant has unloading equipment, an inspection station, rotary screens for the removal of dirt, an incinerator for charring cans to destroy combustible material, shredding and prewashing machinery, and complete equipment for continuous detinning by the alkali process. Since the reclamation of tin in this way does not seem to be commercially feasible because of the cost, the pilot plant has been set up with the frank hope that the Government

will eventually finance operations.

As a possible alternate to the reclaiming of tin, it is reported that a new process of steel plate manufacture yields a product about as good as tinplate. The process adds a golden sheen by converting the surfaces of sheet steel chemically into a rust- and corrosion-resistant iron phosphate coating. The treated sheets are lacquered for further protection and the cans are labeled just as cans have been labeled for years.

Glass is also expected to help fill the gap left by the shortage of tin. Plastics already have appeared in the form of single-service beer containers. And paper, treated with paraffin and other substances so as to be rendered moistureproof, can be put to additional uses in the container field.

There is no immediate shortage of wood for the production of crates and boxes, but there may be a shortage later on. The War Production Board is already working on a plan whereby boxes and crates can be assembled at city markets for reuse in producing areas, and the Quartermaster-General has instructed Army posts to return containers, including egg crates, as promptly as possible to trade channels.

A DEVELOPMENT that may be of lasting benefit is the trend toward greater standardization in the container industry. At the present time the Freight Container Bureau, an agency established and sponsored by the railroads, recognizes about 540 different sizes of crates, drums, and sacks for marketing fruits and vegetables. Such a large number of sizes inevitably leads to confusion and loss of efficiency in marketing. But reduction in the number of sizes to approximately 110 was recommended at a recent meeting of the National Container Committee as a necessary step in making the best use of available materials. The Committee, composed of shippers and receivers, met with railroad representatives and members of the War Production Board and the

United States Department of Agriculture.

The War Production Board, in its order allocating the use of tinplate, has recognized the need for fewer sizes of tin cans. Small-sized cans have been eliminated entirely and emphasis has been placed on a few cans of certain sizes that have become more or less standardized through usage. Fruits and vegetables, for example, will be packed mostly in No. 2, No. 2½, and No. 10 cans. Such standardization is expected to save 7 percent of our available supplies of tinplate.

Lessing J. Rosenwald, of the War Production Board, has asked both manufacturers and users of glass containers to conserve raw materials by simplifying sizes, shapes, and finishes wherever possible. He has pointed out that a widespread and effective simplification program would reduce the variety of sizes and designs

now in use and thus would permit more effective use of manpower, fuel, and equipment. Another objective of the simplification program is to reduce the quantity of molding equipment used in container manufacture.

THE container industry undoubtedly will have to cope with even more serious difficulties as we set about the grim business of winning the war. But the pattern has already been laid out. Basically, it is a matter of conserving existing supplies through allocation, more careful use, and standardization—together with the development of substitutes. The progress made thus far indicates that the enormous quantities of food being produced will be adequately packaged.

HARRY HENDERSON,
*Agricultural Marketing
Administration.*

Farm Transportation and the War

ONE of the most serious shortages looming in this country—one which will intensify the shortage of many commodities—is that of transportation. By the fall of 1942 the transportation problem will be acute. On top of a greatly increased tonnage of commodities—and numbers of men—to be moved, are the difficulties arising out of loss and diversion of ships and an impending deterioration in motor transport.

Tentative estimates suggest that the realization of farm production goals this year will mean a million tons of hogs more than last year to be hauled by truck from farms to primary points; likewise 5 million tons more of milk to cheese factories, condensaries and drying plants. Add together the increased volume of dairy, livestock, and poultry products, grain, oilseeds, fruits, vegetables, and fibers necessary for war needs, which must flow from farm to storage, to manufacture, finally to

consumption, and the sum represents an unknown but certainly large new call upon transport facilities. In the first stage this means highway transport.

IN 1941, the United States had registered a total of 34,990,720 motor vehicles of all kinds (an increase of 2,537,859 over 1940), according to estimates of the Public Roads Administration. In 1941, there were registered 4,911,500 privately owned motor-trucks and tractor trucks and 635,620 publicly owned trucks. By comparison, in 1935 there were 3,647,414 privately owned and perhaps 100,000 to 200,000 publicly owned trucks.

The 1940 census showed 4,144,136 automobiles and 1,047,084 motor-trucks on farms in the United States. (In 1930 the number of automobiles was 4,134,675 and of motortrucks 900,385). Of the million trucks on farms in 1940, some 390,800 were

listed as comparatively new—that is, of models between 1936 and 1940. Of models between 1931 and 1936, the census listed 245,034; models of 1930 and earlier 294,249. The average age of all farm motortrucks and automobiles was probably about 6 to 7 years.

The farm-truck situation was presumably improved through new purchases in 1940 and 1941, but it is probable that the rubber on these trucks is at the stage at which the most careful conservation is absolutely necessary.

ON the whole, the beginning of 1942 found the country with the best motortruck equipment in its history. It had roughly 5½ million trucks, representing apparently a peak in carrying capacity and in miles of serviceability, but a peak which probably cannot long be maintained.

Many statistical calculations have been made of the rubber situation, including all the possibilities of reclaimed, synthetic, and other rubber; but they all come back to the fact that there will be little or no more rubber for civilian tires. When the present tires are gone on our cars and motortrucks, there will be no more for most people, for a long while.

The 5½ million motortrucks now on hand, including the million trucks on farms, will last effectively just about as long as their tires last. Rubber is the limiting factor. As the tires go, so go the trucks. And as the trucks go, so goes the primary transport system upon which the farmers of this country have come to depend.

The first point that stands out in this situation is that it must be impressed upon every farm car and motortruck owner that this is a deadly serious problem: That *virtually no more rubber is in sight for tires*; that his truck is now just *as good as its weakest tire*; that he should be looking ahead to the day when his truck will finally have to be set aside. With proper

care and good luck that might be 5 or 8 years hence; or perhaps it is no further ahead than next year; or carelessness can make it next fall or next month! It is true that present regulations permit a farmer to apply for new tires or recaps, under certain conditions; and presumably farmers will remain reasonably high on the preferred list. But it is not to be expected that these permissive regulations will add any new rubber to the national stock-pile. When the day comes that there is no more rubber for any civilian users, the permission to buy will mean nothing.

A MAJOR necessity now is for immediate organization, by local communities, of motortruck transportation. Federal or State agencies can help. But the vital need is for some kind of organized arrangement in every country neighborhood to "double up" on loads from farm to town and likewise on bringing supplies from town to farm, and for errands and trips of all kinds.

In many cases farm neighbors are already doing this. But in many more the movement needs to be started and brought to an orderly arrangement whereby the use of neighborhood vehicles can be rotated and every possible mile of service can be gotten out of these tires and trucks.

There is a further essential job of organizing commercial motortruck service to take care of part of the haul between farm and town, and to help on the broader, long-distance problem. That is a job for transportation men.

But the organization of farm and locally owned trucks to piece out the service of each and stop the unnecessary duplication of trips is a job that finally comes down into every farm neighborhood—and it is a job that needs to be done quickly.

OTHER things which might be done to help in this transportation situation include more careful planning of

railroad shipments to help reduce congestion and delay and facilitate the moving of empty cars. It may even be found feasible and wise to build up reserve stocks of essential foods and materials in different parts of the country; or production may be further adjusted so as to reduce long shipments.

Farmers should support all steps to improve efficiency in the use of railway equipment—such matters as heavier loading per car, faster loading and unloading of cars, more careful timing of orders for cars, and the like. It is possible for public agencies to take various measures for the more efficient use of motortrucks in commercial service.

All rural authorities should be giving thought to the measures which may become necessary to maintain farm-to-market highways in good repair. This is likely to become important as such roads tend to go down because of the probable reduction of W. P. A. labor and of available public funds.

THE following suggestions are offered for the conservation of farm cars and trucks:

(1) Take the best possible care of cars and trucks and especially of tires. Have tires inflated every week to proper pressure. Have wheels aligned. Exchange right and left tires once in a while. Look them over often for cracks or cuts, and repair these before you have a blow-out. Don't let tires stand on an oily or greasy floor and don't leave them standing in hot sun. Don't drive faster than 30 miles an hour—speed is the bitter enemy of tires.

(2) Arrange with one or more neighbors to exchange trips. Do all your regular hauling, so far as possible, on that basis. Form a little group on your road to do this in a systematic way. Pool your loads.

(3) Don't go "empty." If you have an errand in town call up your neighbors and take everybody on the

road who needs to go that day—then let them do the same by you. Make similar arrangements for small part-loads of produce. Don't make a trip alone with just a bushel of potatoes or a sack of grain, nor to get one or two small items of supplies. "Double up." Cooperate with your neighbors.

(4) Plan your buying in town so as to save trips.

(5) Pick up all nails, pieces of board, broken glass, jagged rock in the highway and around your own buildings and driveways.

(6) Make sure that you carry an inflated spare tire, or jack, air pump, and patching kit. A ruined tube or casing now is a tragedy.

(7) Arrange to keep larger supplies on hand—things like fuel, purchased feed, and groceries. This will not only save trips but will assure having them on hand in time of possible transportation tie-ups.

(8) Arrange storage space so you can hold your produce at home for a time, in case of unexpected transportation shortage.

(9) Cut down on some of the youngsters' trips into town to the movies, and rides just for fun. As a rule, young drivers are harder on cars and tires than are mature persons.

(10) Eliminate driving in bad weather so far as possible. Wet roads, ice, and mud are hard on tires.

(11) Have a place where your car and spare parts can be securely locked up—and keep the car and truck under lock, especially at night.

(12) Finally, look ahead a year or two or three. How will you be fixed then for car or motortruck? Remember, for more than a hundred years virtually all the farm produce in this country was hauled to market by animal power. Don't let the matter of horse-and-wagon equipment get entirely out of your mind. We helped to win one World War that way and we can win another that way if we have to—and we may have to.

A. B. GENUNG.

A Study of Poultry Markets

AT THE request of the American Farm Bureau Federation, the Bureau of Agricultural Economics last year began an extensive study of the marketing of poultry and eggs. The Bureau selected 29 terminal poultry markets for study. By year's end, 16 markets east of the Mississippi River had been covered. Significant phases of the work were reported to the Federation at its annual meeting at Chicago in December. The Federation commended the study and urged its continuance "to cover the entire United States."

The survey covered virtually all of the leading markets east of the Mississippi River, except New York, Cincinnati, and Louisville. Included were Boston, Philadelphia, Buffalo, Baltimore, Washington, Detroit, Cleveland, Chicago, Indianapolis, Memphis, New Orleans, Birmingham, Atlanta, Charlotte, and Jacksonville.

It was found that slightly less than half the poultry reaching the 16 cities was live poultry, while the remainder was dressed. In some of the southern cities, more than 80 percent of the receipts are live poultry. At least in the north and east, dressed poultry seems to be taking the place of the live product. Around 95 percent of all the live poultry is moved to market by truck. The most common dealer contacting the producer is the trucker who operates his own truck. The producer is paid varying amounts under the market price, depending on the distance from market.

IN MOST of the cities, more than 85 percent of the live poultry moves through regular markets; but in six of the smaller cities there are no definite poultry and egg markets and the dealers are scattered over a wide area. These scattered markets waste time and money for buyers and small shippers or producers alike.

In cities where definite market areas exist, motortruck receipts of live poultry go directly to the dealers' stores. This eliminates the extra handling and hauling which accompany rail transportation in most of these markets. Even in the markets promoted and established by railroads, few dealers have rail sidings for direct unloading.

Many of the live-poultry markets have streets too narrow for modern truck-trailer units. In many cases, the buyer must carry or wheel his purchases on hand trucks along the street, and this is sometimes true for trucks making deliveries. The traffic problem could be alleviated by providing parking space for buyers' trucks and for long-distance trucks waiting for a chance to unload.

Many of the stores are old and narrow, lack unloading platforms at truck-bed height, and have no rear entrances. The small stores often will not hold all the coops, which must be stacked on the sidewalk. All these things delay the unloading of live poultry and cause heavier shrinkage, particularly in warm weather.

Scarcely any two markets have the same methods for handling live poultry. The commission man, once common, is disappearing rapidly. Commission sales are important now in only 4 of the 16 cities—Buffalo, Philadelphia, Baltimore, and Cleveland. In many other cities competition is forcing transactions to an outright sale basis. Producers demand cash from the truckers, who in turn demand cash from the receivers in order that they may buy more poultry.

IN THE South, consumers very definitely prefer fresh-killed poultry. In the northern markets, in addition to commission selling, live poultry is handled by wholesale re-

ceivers who usually have facilities for dressing and are in a position to sell either live or dressed poultry to the retail stores. In Washington, Memphis, and Boston, strict health and zoning regulations tend to prevent the selling of live poultry in retail stores. With few exceptions, live poultry in these cities is dressed at the stores of wholesale receivers. More frequent inspection is possible as a result of this concentration in fewer dressing plants.

While most of the live poultry goes to independent receivers, in Jacksonville, New Orleans, and Birmingham the chain stores are handling live poultry in their retail stores. Some of them operate dressing plants which supply fresh-killed poultry to their retail units.

Selling hours in most of the markets have been established merely by custom. However, in Chicago, Detroit, and Boston union rules determine the hours—usually from 7 a. m. to 3 p. m. There was no indication that business suffered as a result, except perhaps from some delay and congestion in unloading in the morning.

There is no official grading of live poultry, and the grades in use vary from one market to another and also vary with the demand for any particular class of bird.

Although the railroads haul only 5 percent of the live poultry, they carry a little more than half of the dressed poultry. Refrigerator cars are the most common means of transportation, but in recent years refrigerated and insulated truck shipments have increased considerably. Split cars of poultry, eggs, and butter are often shipped to the smaller markets.

IN THE 16 cities surveyed, packing-house branches and chain stores handle more than half the dressed poultry. Only a little more than half is handled in the regular markets, as contrasted with nearly 80 percent of the live poultry. However, the dressed poultry is graded, much of it is bought

by telephone, and as a result there is less need for a concentrated market.

Dressed poultry is handled on the same markets that handle live poultry; and, generally speaking, it is sold as a sideline with other perishable products, such as meats, eggs, butter, and provisions. The wholesalers and jobbers of dressed poultry, as a rule, have better facilities than the live poultry dealers, although in many cases they are affected by the bad traffic conditions and lack of rail connections.

The Urner-Barry Producers Price Current is used as a basis of settlement for fresh-killed or frozen stock in the eastern markets and thus influences the operation of western packing plants supplying these markets. Receivers also make wide use of the Chicago Price Current Quotations. The commission method of sale is not used, and outright sales are common. Brokers collect a brokerage fee varying from $\frac{1}{4}$ to $\frac{1}{2}$ cent a pound for their services.

Many of the poultry stores and much of the equipment were very unsanitary. The statistics on receipts and prices collected by the Agricultural Marketing Administration in Chicago, Boston, Philadelphia, and Baltimore are widely used; but in some other cities no information on volume of receipts is available. In some of the exchanges where the amount of trading is rather limited, the prices established seem to determine the general level of prices on the market and perhaps over a wide area.

"If live poultry is to continue to move to the large cities, the markets where it is handled * * * must be improved," the report comments. "These markets, * * * with their high cost of operation, are without doubt contributing to the shift from live poultry to dressed poultry * * *. If adequate markets were available, it would be possible to break up some of the unfair practices that now exist, and certain costs could also be reduced or eliminated."

COMPLAINTS of racketeering were made in only three of the cities—three of the largest in the group. This took such forms as compulsory use of hired trucks, requirements that an excessive number of men be hired to unload trucks, collection of inspection fees for services not performed, and some discrimination against poultry dressed before it reached the city, through higher inspection fees. A number of other complaints were made about questionable practices.

"Better organization and control of the markets would undoubtedly contribute to a solution of some of these problems in that it would facilitate the enforcement of proper regulations by

the various Governmental agencies," the report concludes.

It recommends: (1) Improving some of the established markets in order to make them operate more efficiently; (2) bringing the marketing of poultry under the Perishable Agricultural Commodities Act or expanding the activities of the Packers and Stock Yards Division, and strengthening the work of the Food and Drug Administration; (3) improving the grading and market news services; (4) proper regulation of established markets to put a stop to short weights, and other unethical practices.

FRANKLIN THACKREY.

Farm Real Estate Values Rise

A GENERAL increase in land values as well as widespread interest in opportunities to buy farm properties are evident from reports received in the annual farm real estate survey by the Bureau of Agricultural Economics. A summary of these reports indicates a rise in values of 7 percent for the country as a whole during the past year. This brings the index of values to 91 percent of the 1912-14 base period. The increase is the most substantial that has occurred since the years just prior to 1920, and is almost twice the annual increases reported for the years immediately following the depression low in 1933. The substantial advance of the past year marks the end of a 5-year period during which the National average was remarkably stable at about 85 percent of the prewar average.

Farm real estate values increased generally the country over during 1941 with some advance reported for each of the 48 States. Higher values by approximately 10 percent were reported for the East North Central and East South Central groups of States; about 8 percent in the Moun-

tain States, and about 6 percent in the West North Central, South Atlantic, West South Central and Pacific Divisions. Increases were more limited in the North Atlantic States, with a rise of 3 percent or less in both the Middle Atlantic and New England States.

The largest advance in any State during the past year was in Indiana—14 percent. Increases, almost as large, were indicated for Illinois, Kentucky, and Michigan, where values rose about 13 percent. Ten other States, including four in the Mountain region, reported higher values of 9 to 11 percent.

DURING the past year there were, in general, more influences operating favorably to an improved farm-real-estate market than at any other time since 1920. The prevailing high number of voluntary and low number of forced sales were significant features of the strengthening situation. When the volume of sales is considered along with the fact that in the better farming areas the land holdings of corporate lending agencies have been showing significant declines for several years, the rapid response of land values

to improved price and income levels should probably not be viewed with alarm.

While improved prices tend to hasten the sale of available farms, the removal from the market of the abnormally large number of farms for sale would be a factor which, by itself, would have a strengthening influence. This situation, along with some warranted rise in farm-land values due to higher price levels expected to prevail for the duration of the war, would appear to be the primary basis for explaining and possibly even justifying the substantial value increases that occurred during the past year.

EVEN though there might appear to be ample justification for the value increases which took place during the past year, and though current conditions indicate the relatively high farm prices may continue to prevail for the duration, there are conflicting forces operating which will influence the extent to which net incomes will increase during the next few years.

In many areas, there are already indications that the benefits of higher farm prices will, to a large extent, be offset by farm labor shortages with higher wages and generally higher production costs together with inadequate supplies of machinery, equipment, fertilizers, and transportation facilities due to priorities and allocations. These situations, along with prospects for price ceilings for farm products, increased income taxes and other expenses, would all tend to limit the expected income increases upon which to justify further substantial enhancement in values. Furthermore, there appears to be little basis for assuming that the currently high farm prices and demands will continue indefinitely, and consequently high incomes resulting from these temporary conditions should have only a limited effect on current land values.

IFF A farm is purchased for operation or even long term investment, then capitalized earning power and not

speculative prospects should be the basis for determining its value. From this approach, a rough but fairly good approximation of the value of the farm would be 20 times its net rent after paying taxes and other expenses. In other words, if cash rent is \$7 an acre and taxes and other costs \$2 an acre, the reasonable value for this farm land would be in the neighborhood of \$100 an acre. But, it must be remembered that the net rent should be that which can reasonably be expected to prevail over a long period of years rather than current rent which at present might be above the expected future rent due to increased war time demands and prices. Thus, if the expected net rent for the next 3 years was up to \$10 per acre with no assurance of continuing at that level, then the value of the land should change relatively little. In fact, under such a circumstance, the value rise at present should be somewhat under the \$15 additional net rent which would accrue over the 3-year period. The chief danger of excessive land prices from purchases of this type arises through considering current incomes as the level which will continue.

WHERE land is purchased for speculative purposes, primary emphasis is placed on the hope that land prices will go higher, making it possible to sell at a profit. When there is much buying of this type, land prices go up and may get way out of line with normal values or the present value of the future earning power of the land. This is what happened in many areas between 1916 and 1920 and caused plenty of headaches between 1920 and 1935. Farmers and others interested in farming do not want this to happen again; the best way to avoid the serious consequences of excessive land prices, if they do occur, is to refrain from buying land when the price is out of line with normal values. Tenants and others interested in farming as a business will probably be better off in the long run if they pay high rents for a few years rather than

attempt to buy land at prices out of line with reasonable income expectations.

While current market values in general are probably not far out of line with normal values, a continua-

tion of last year's trends would, in a number of areas, soon put market values above those which could be supported by the expected future earning power of the land.

A. R. JOHNSON.

Camps Guide Farm Labor

MIGRATORY labor camps of the Farm Security Administration can play a significant part in meeting the farm labor problem this year. Established in 1935, in a time of labor surplus, these camps were designed to protect the migrant—and the community through which he passed—from the worst dangers of migrant life, by providing minimum housing, sanitary, and community facilities for a portion of the hundreds of thousands of workers who follow the crops. But, with current changes in the farm-labor supply, and with increased attention on the wartime production of food, new uses for the camps have developed.

One important use of the camps has been in the distribution of the farm labor supply. During 1939-41 the number of placements made by the Farm Placement Service in Washington, Oregon, and Idaho alone was nearly doubled. The number of placements increased by 110,000, of which about 100,000 were made by placement offices in Farm Security camps.

EFFECTIVE use of the camps as a base for routing workers to and from jobs was demonstrated last spring on the west coast. Strawberry pickers were needed in Oregon, while pickers in California were unemployed. Oregon growers turned to the State Employment Service for help. Arrangements were made with the California Employment Service for the transfer of idle strawberry pickers to Oregon. Pickers were recruited from the FSA camps, their transportation was paid by the growers and arranged by employment officials; on arrival in Oregon,

the pickers were housed in mobile camps.

As the Farm Placement Service is able to use the camps as a base from which to shift workers rapidly to new jobs, the lag in employment is taken up. Farm output increases as waiting periods decrease. Workers living in Farm Security camps in the Northwest average seven jobs per season. There is little layover between jobs. The camps cut down periods of unemployment by safeguarding and improving the health of workers with adequate housing and sanitary facilities with clinics and a program for emergency medical care. Day nurseries caring for babies and young children also free adult labor when needed.

Lack of adequate shelter commonly keeps farm workers from entering areas where labor is needed. Lack of housing was prominently mentioned among the difficulties in localities reporting farm labor shortages during 1941. To date this year, formal requests for the establishment of camps have been received from 72 counties in 19 States.

TRANSPORTATION problems confront agriculture this year. These include the possible lack of automobiles in transporting workers from one area to another. Emphasis must be placed upon the concentrating of scattered workers and their families, and their transportation in large groups. The migratory labor camps can facilitate this process.

Mobile camps designed for use in areas where camps are needed for only a few weeks at a time can be moved

from place to place. Tents with tent platforms to house the families and community facilities moved by truck, and large trailers to house power plants, clinics, and sanitary units make up the usual mobile camp equipment. There is no definite number of families for any one camp. Different conditions require camps of various sizes; all equipment is designed for flexible use in different combinations. Insofar as possible, the camps follow the migratory workers as the workers in turn follow the crops. In emergency situations the camps can be moved anywhere.

SEVENTY-THREE mobile camps are in operation on the west coast—in Arizona, California, Washington, Oregon, and Idaho. This spring and summer, 19 new mobile units are opening along the Atlantic Seaboard, serving Maryland, Virginia, North Carolina, Delaware, New Jersey, and New York. Next winter, 14 of these units will settle in Florida areas where citrus fruits and vegetable harvesting is concentrated. Forty-one camp sites have been leased, or are being leased, to

serve the 19 units this season; it is expected that these camps will relieve a possible housing shortage in areas where seasonal labor is needed most.

While single and unattached men have formed the largest proportion of the agricultural workers on crops along the Atlantic coast, it is expected that fewer men will be available for work this year, that more families will make up the migrant population. Adequate housing must be made available for these families, not only for their own health and protection, but to induce workers to come into the areas for the harvesting seasons.

The Farm Security Administration makes no pretense of solving with its migratory camp program the problems inherent in situations involving seasonal agricultural labor. But, by improving the health and morale of some of the workers, by providing a base through which other agencies can function, the camps can be an important factor in facilitating the production of food for freedom.

RICHARD SASULY,
Farm Security Administration.

About Guayule Rubber

PURPOSE of the Guayule Rubber Production Act signed by President Roosevelt last month is "to make available a domestic source of crude rubber for emergency and defense uses." The act authorizes the Department of Agriculture to buy out the Intercontinental Rubber Co.'s guayule seed supplies, processes and facilities at Salinas, Calif., where there are 577 acres of growing shrubs, 4 years or older, and a small factory used to extract the rubber from the shrubs. The law limits field plantings to 75,000 acres—which is about all that can be accomplished by the spring of 1943 with the seed available—but the act could be amended later if the situation warrants.

Secretary of Agriculture Claude R.

"Gwa-yoo-la" or "wi-oo-la"—it makes no difference how you pronounce it, the important thing is that the guayule plant yields rubber. Historians say that it was once used by the Aztecs for making balls used in a game similar to our basketball. They have yet to record that centuries later it was to be used to help win for Democracy a fight against aggression * * * Anyhow, the guayule plant has possibilities in lessening the wartime gap in our rubber supplies. These possibilities are discussed in the accompanying article.—Ed.

Wickard immediately directed the Forest Service and the Bureau of

Plant Industry to proceed with a program for government production of guayule rubber in the Western Hemisphere. The Department had been studying on a small scale since the early 1920's the guayule plant and its potentialities. The Forest Service is charged with production, the BPI with research, and other bureaus of the Department of Agriculture are to be called in as needed.

First step was the purchase for \$1,721,235 of the Salinas properties and processes of the Intercontinental Rubber Co. Then a seed-treating plant and a 1,000-man labor camp to house the workers on the project were built. Windbreak fencing was transferred from the Prairie States Forestry Project to protect the nursery. In a few days more than 125 trucks, 85 tractors, and 420 pieces of farm machinery were started toward Salinas or were on the job. A thousand acres have already been planted with guayule seedlings under Government supervision. By next spring, this number will be expanded to about 60,000 acres, as authorized by law.

GUAYULE is a rubber-bearing desert shrub native to north central Mexico and extending across the Rio Grande somewhat into Texas. Since the beginning of this century, the Intercontinental Rubber Co. has been producing rubber in Mexico to a limited extent from the wild shrub. Almost all this rubber has been shipped into the United States, with imports averaging about 5,000 tons a year. Production of such wild rubber is expected to be stepped up to as much as 10,000 tons a year, but this is believed to be the outside limit that is possible without unduly depleting the natural supply of the shrub. Experiments to domesticate the plant were begun in Mexico in 1907, but these were shifted to the United States as a result of the Mexican Revolution of 1912. For climatic reasons the Salinas Valley of California was selected as the center of operations.

Chief object of the experiments has been to increase the rubber content of the guayule to the point where guayule could compete commercially with plantation rubber. The wild shrub of Mexico yields 8 to 12 percent of rubber based on dry weight of the shrubs, and has a resin content of about 20 percent. Selections have now been made which after 4 years in the field yield nearly 20 percent of rubber dry weight, with a resin content of 16 percent in the extracted rubber. This improvement was accompanied by new methods of cultivation; the use of special machinery; and better ways of extracting rubber.

Guayule rubber is considered by experts to be approximately equal in quality to high-grade plantation rubber. The cost of taking out the resin has been estimated at 1 to 5 cents a pound. Indeed, the process of de-resination may pay for itself in that the resin can be used in plastics and a variety of other products. Use of the rubber requires no change in the nation's rubber manufacturing plants.

DEPARTMENT technicians estimate that under favorable conditions, guayule can be sold at 20 cents a pound. This compares to the present price of 22½ cents a pound for plantation rubber, and to an estimated minimum of 30 cents a pound for synthetic rubber. Plantation rubber averaged 12.4 cents a pound during the decade 1930 to 1939, but it can withstand a declining price down to 10 cents or even 6 cents a pound. Under normal competitive conditions, guayule could not long survive a price much below the present price of rubber.

For these reasons, Department technicians believe that guayule offers insufficient returns on a long-time basis to replace plantation rubber. For long term supplies at costs which are competitive with those for rubber produced elsewhere in the world, they look to the development of plantation rubber in Tropical America. But the trees we are planting in Latin

America will not begin producing for 7 years; guayule, meanwhile, will be needed, along with the synthetic rubber to be produced in this country.

Some of the guayule we are growing now may be used to put new life into reclaimed rubber. Some of it may be used in mixtures with synthetic rubber. Testimony before Congress in connection with the Guayule Act revealed that in order to produce quality tires, real rubber must be used in combination with synthetic rubber. It was pointed out that Germany had found it necessary to use 65 percent natural rubber and 35 percent synthetic rubber to meet its rubber needs.

HOW much guayule are we likely to get under the most favorable conditions? We have only a limited supply of seeds—not quite enough for next year's 75,000 acres of field plantings provided by law. Estimates of yield are 350 pounds of rubber per acre of guayule if the plant is harvested at the end of the second year in the field; 700 pounds at the end of the third year; 1,200 pounds, or even more, if the shrub is not harvested until the end of 4 years. Most rubber is obtained when the shrub is 4 to 7 years old.

The United States normally uses 600,000 to 700,000 tons of rubber a year. If we produce 75,000 acres of guayule and the average yield is 1,200 pounds per acre, we would have 45,000 tons of guayule rubber—or 7 percent of a normal year's requirements. We need rubber immediately. But since the seed and seedling supply of guayule is so limited, we cannot harvest too soon if we are to preserve the improved strains that have been developed during the last 30 years. Some specialists have estimated that we might be able to process a small quantity of rubber during the next 2 years—possibly 1,000 tons—but our main purpose during this period probably will be to increase the supply of seed and seedlings. Production could be increased greatly in subse-

quent years as seed supplies become available.

Only portions of California, Arizona, Texas, New Mexico, and possibly adjacent States have the climate in which guayule may be grown successfully. Rainfall of only 8 to 20 inches a year is all that is needed for normal yields, together with long dry summers and winter temperatures not below 5° F. But even to the farmers in these areas, guayule has little meaning for the time being. Officials in charge of the project recall that when farmers in California planted guayule in 1926, rubber was selling at \$1.25 a pound. When rubber dropped to 3 cents a pound in 1932, farmers plowed up their fields and planted wheat instead. As the present project advances, officials expect that guayule growing can be contracted to individual farmers, but right now the supply of seed and seedlings is so limited that none is being distributed.

In production, presprouted seeds are mixed with sawdust and planted in nursery beds with a machine that distributes the seeds evenly and covers them with a thin layer of sand. These nursery beds are kept moist by sprinkling several times a day with overhead irrigation. After 8 to 12 months, the plants are given a chemical dip and transplanted to the field where they are cultivated like corn. Seed is harvested at the end of each year by a vacuum-type collector.

IF the present price of plantation rubber is maintained, guayule growing might well be continued on a permanent basis after the war should we so desire. Even if the price of rubber falls, the possibility is that further improvement in strains and methods of growing guayule might bring the cost of guayule rubber down to a competitive level. The proposal also has been made to maintain guayule in nurseries after the war as insurance against future emergencies.

—ANN S. KHEEL.

Economic Trends Affecting Agriculture

Year and month	Industrial production (1935-39 = 100) ¹	Income of indus- trial workers (1935-39 = 100) ²	Cost of living (1935-39 = 100) ³	Whole- sale prices of all com- modi- ties ⁴	1910-14=100			Farm wages	Taxes ⁵		
					Prices paid by farmers for commodities used in ⁶						
					Living	Produc- tion	Living and pro- duction				
1925	90	126	125	151	164	147	157	176	270		
1926	96	131	128	146	162	146	155	179	271		
1927	95	128	124	139	159	145	153	179	277		
1928	99	127	123	141	160	148	155	179	279		
1929	110	134	122	139	158	147	153	180	281		
1930	91	110	119	126	148	140	145	167	277		
1931	75	85	109	107	120	122	124	130	254		
1932	58	59	98	95	108	107	107	96	220		
1933	69	61	92	96	109	108	109	85	188		
1934	75	76	96	109	122	125	123	95	178		
1935	87	87	98	117	124	126	125	103	180		
1936	103	100	99	118	122	126	124	111	181		
1937	113	117	103	126	128	135	130	126	186		
1938	89	91	101	115	122	124	122	125	183		
1939	108	105	99	113	120	122	121	123	188		
1940	123	119	100	115	121	124	123	126	183		
1941	156	163	105	127	133	133	133	147			
1941—April	144	142	102	121			124	138			
May	154	157	103	124			125				
June	159	167	105	127	129	128					
July	160	173	105	130			130	160			
August	160	174	106	132			133				
September	161	177	108	134	136	135	136				
October	163	178	109	135			139	165			
November	166	180	110	135			141				
December	167	187	110	137	143	141	142				
1942—January	171	196	112	140			146	166			
February	172	194	113	141			147				
March	172	193	114	142	150	149	150	167			
April ⁷				144			151	177			

Index of prices received by farmers (August 1909-July 1914=100)

Year and month	Grains	Cotton and cotton- seed	Fruits	Truck crops	Ment ani- mals	Dairy prod- ucts	Chick- ens and eggs	All groups	Ratio prices received to prices paid
1925	157	177	172	153	141	153	163	158	99
1926	131	122	139	143	147	152	159	145	94
1927	128	128	144	121	140	155	144	139	91
1928	130	152	176	159	151	158	153	149	96
1929	120	144	141	149	156	157	162	146	95
1930	100	102	162	140	134	137	129	126	87
1931	63	63	98	117	92	108	100	87	70
1932	44	47	82	102	63	83	82	65	61
1933	62	64	74	105	60	82	75	70	64
1934	93	69	100	103	68	95	89	90	73
1935	103	101	91	125	117	108	117	108	86
1936	108	100	100	111	119	119	115	114	92
1937	126	95	122	123	132	124	111	121	93
1938	74	70	73	101	114	109	108	95	78
1939	72	73	77	105	110	104	94	93	77
1940	85	81	79	114	108	113	96	98	80
1941	66	113	92	145	144	131	122	122	92
1941—April	90	88	89	161	126	121	104	110	89
May	93	98	89	146	136	124	107	112	
June	96	107	97	146	142	120	118	118	92
July	98	121	93	130	151	132	127	125	97
August	99	128	100	133	155	135	130	131	98
September	106	150	89	145	163	140	141	139	102
October	101	144	107	164	154	145	146	139	100
November	103	136	98	147	149	148	157	135	96
December	112	138	98	162	157	148	153	143	101
1942—January	119	143	102	204	164	148	147	149	102
February	121	150	98	161	173	147	135	145	99
March	122	151	111	136	180	144	130	146	97
April	120	158	118	158	190	142	131	150	99

¹ Federal Reserve Board, adjusted for seasonal variation. Revised September 1941.

² Adjusted for seasonal variation. Revised November 1941.

³ Bureau of Labor Statistics.

⁴ Bureau of Labor Statistics index with 1926=100, divided by its 1910-14 average of 68.5.

⁵ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁶ Index of farm real estate taxes per acre. Base period represents taxes levied in the calendar years 1909-13, payable mostly within the period Aug. 1, 1909-July 31, 1914. ⁷ Preliminary. ⁸ Revised.

NOTE.—The index numbers of industrial production and of industrial workers' income shown above are not comparable in several respects. The production index includes only mining and manufacturing, the income index also includes transportation. The production index is based on volume only, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income, since output can be increased or decreased to some extent without much change in the number of workers.